

***Salmo salar* (Atlantic Salmon)****Priority 1 Species of Greatest Conservation Need (SGCN)****Class:** *Actinopterygii* (Ray-finned Fishes)**Order:** *Salmoniformes* (Salmon, Trout, And Whitefish)**Family:** *Salmonidae* (Salmonids)**General comments:** none**No Species Conservation Range Maps Available for Atlantic Salmon****SGCN Priority Ranking - Designation Criteria:****Risk of Extirpation:**

Federal Status: Endangered

**State Special Concern or NMFS Species of Concern:** NA**Recent Significant Declines:** NA**Regional Endemic:** NA**High Regional Conservation Priority:**

NatureServe:

Global Rank: T1

American Fisheries Society, Endangered Species Committee:

Status: Endangered, Trend: taxon is new, Listing: 1234, Global Rank: G5T1Q, Comment: Gulf of Maine population

**High Climate Change Vulnerability:** NA**Understudied rare taxa:** NA**Historical:** NA**Culturally Significant:**

Species identified as both biologically vulnerable and culturally significant by Maine's tribes.

**Habitats Assigned to Atlantic Salmon:****Formation Name      Freshwater Aquatic****Macrogroup Name      Lakes and Ponds****Habitat System Name:** Lakes and Ponds Macrogroup - Unknown habitat system**Macrogroup Name      Rivers and Streams****Habitat System Name:** Headwaters and Creeks **\*\*Primary Habitat\*\*** **Notes:** spawning habitat, adults, eggs, fry**Habitat System Name:** Large River **\*\*Primary Habitat\*\*** **Notes:** juvenile rearing and feeding habitat**Habitat System Name:** Medium River **\*\*Primary Habitat\*\*** **Notes:** juvenile rearing and feeding habitat**Habitat System Name:** Small River **\*\*Primary Habitat\*\*** **Notes:** juvenile rearing and feeding habitat**Formation Name      Intertidal****Macrogroup Name      Intertidal Water Column****Habitat System Name:** Confined Channel **\*\*Primary Habitat\*\*** **Notes:** migration and feeding**Formation Name      Subtidal****Macrogroup Name      Subtidal Pelagic (Water Column)****Habitat System Name:** Nearshore **\*\*Primary Habitat\*\*** **Notes:** migration and feeding habitat**Habitat System Name:** Offshore**Stressors Assigned to Atlantic Salmon:**

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<b>Stressor Priority Level based on Severity and Actionability</b>		Moderate Severity	High Severity
	Highly Actionable	Medium-High	High
	Moderately Actionable	Medium	Medium-High
	Actionable with Difficulty	Low	Low

**IUCN Level 1 Threat**      **Agriculture and Aquaculture****IUCN Level 2 Threat:**      Marine and Freshwater Aquaculture**Severity:** Severe      **Actionability:** Highly actionable**Notes:** The Marine Aquaculture of Atlantic salmon impacts; escapees reproducing with wild stock, disease transfer. Likelihood is high and increasing. Spatial extent is coastal Maine.**IUCN Level 1 Threat**      **Climate Change and Severe Weather****IUCN Level 2 Threat:**      Storms and Flooding**Severity:** Severe      **Actionability:** Moderately actionable**Notes:** Increased flooding in the spring could effect intra-gravel egg development and fry emergence. Preserving riparian buffer zones would protect streams from high spring run off.**IUCN Level 1 Threat**      **Natural Systems Modifications****IUCN Level 2 Threat:**      Dams and Water Management-Use**Severity:** Severe      **Actionability:** Moderately actionable**Notes:** Dams hinder downstream fish passage and can block upstream fish passage. Dams also alter the natural flow and create habitat for predator. The likelihood of removing a hydropower dam is low, while the likelihood of removing of a non-hydro dam can be high. In most cases, the installation of up and downstream fish passage will moderate the impact. Spatial extent is entire state of Maine**IUCN Level 1 Threat**      **Pollution****IUCN Level 2 Threat:**      Domestic and Urban Waste Water**Severity:** Severe      **Actionability:** Moderately actionable**Notes:** Freshwater Atlantic salmon habitat near populated areas will be affected. As populations increase this can be minimized. Spatial extend is entire state of Maine**IUCN Level 1 Threat**      **Residential and Commercial Development****IUCN Level 2 Threat:**      Housing and Urban Areas**Severity:** Severe      **Actionability:** Moderately actionable**Notes:** Residential and urban development impacts the streams water quality, Atlantic salmon habitat quality (rearing and spawning habitat), reduces stream canopy, increases stream temperature. Likelihood is high and increasing. Spatial extent is Maine.**IUCN Level 1 Threat**      **Transportation and Service Corridors****IUCN Level 2 Threat:**      Roads and Railroads**Severity:** Severe      **Actionability:** Moderately actionable**Notes:** Current road crossings within Atlantic habitat pose some passage problems because they are barriers to upstream passage, impound water, and alter the natural stream. In some instance, railroad crossing of stream are also passage barriers. 'Actionability' is moderate because culverts must be replaced and can be constructed to allow passage, but sometimes are not. Also must wait until the culvert is in need of replacement in most cases which can be 20-30 years. Likelihood is moderate because construction can allow passage. Certainty is low. Spatial extent is entire state of Maine.

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None. *Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.*

**Conservation Actions Associated with the Diadromous Fish Guild:****Conservation Action**      **Category:** Public Outreach      **Biological Priority:** moderate      **Type:** on-going

Continue to work with the fishing industry to develop gear modifications that reduce of bycatch of diadromous fishes

**Stressor(s) Addressed By This Conservation Action**

Fishing and Harvesting of Aquatic Resources

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<b>Conservation Action</b>	<b>Category:</b>	<b>Biological Priority:</b>	<b>Type:</b>
Public Outreach	Public Outreach	high	on-going
Conduct education to increase awareness of the importance of these species to maintaining productive ecosystem functioning.			

**Stressor(s) Addressed By This Conservation Action**

Lack of knowledge, Fishing and Harvesting of Aquatic Resources

<b>Conservation Action</b>	<b>Category:</b>	<b>Biological Priority:</b>	<b>Type:</b>
Research	Research	high	on-going
Improve understanding of species distribution especially in regards to ecosystem interactions, predator-prey relationships, and prey buffering concepts			

**Stressor(s) Addressed By This Conservation Action**

Lack of knowledge

<b>Conservation Action</b>	<b>Category:</b>	<b>Biological Priority:</b>	<b>Type:</b>
Habitat Management	Habitat Management	high	on-going
Encourage improved municipal planning for siting for new or retrofitting development, taking into account future environmental change, to improve connectivity for diadromous fish passage			

**Stressor(s) Addressed By This Conservation Action**

Industrial and Military Effluents, Domestic and Urban Waste Water, Commercial and Industrial Areas , Housing and Urban Areas

<b>Conservation Action</b>	<b>Category:</b>	<b>Biological Priority:</b>	<b>Type:</b>
Survey and Monitoring	Survey and Monitoring	high	on-going
Ground-truth mapped habitat and compare to historical maps to monitor change over time, may require updating mapping plans to map more frequently			

**Stressor(s) Addressed By This Conservation Action**

Lack of knowledge

<b>Conservation Action</b>	<b>Category:</b>	<b>Biological Priority:</b>	<b>Type:</b>
Survey and Monitoring	Survey and Monitoring	critical	on-going
Monitor population stock status through surveys and sampling programs			

**Stressor(s) Addressed By This Conservation Action**

Other Threat

<b>Conservation Action</b>	<b>Category:</b>	<b>Biological Priority:</b>	<b>Type:</b>
Research	Research	critical	on-going
Determine the location and timing of critical habitat use (for endangered species) and important habitat use for diadromous fishes at different life history stages			

**Stressor(s) Addressed By This Conservation Action**

Lack of knowledge

<b>Conservation Action</b>	<b>Category:</b>	<b>Biological Priority:</b>	<b>Type:</b>
Research	Research	high	new
Investigate methods to reduce incidental bycatch in commercial and recreational fisheries			

**Stressor(s) Addressed By This Conservation Action**

Fishing and Harvesting of Aquatic Resources

<b>Conservation Action</b>	<b>Category:</b>	<b>Biological Priority:</b>	<b>Type:</b>
Research	Research	high	on-going
Gather information to support management, including stock assessments, population genetics, population monitoring, etc.			

**Stressor(s) Addressed By This Conservation Action**

Fishing and Harvesting of Aquatic Resources, Lack of knowledge

<b>Conservation Action</b>	<b>Category:</b>	<b>Biological Priority:</b>	<b>Type:</b>
Research	Research	high	new
Improve understanding of the relative roles of natural predation, fishing mortality, and climate change in stock dynamics			

## *Salmo salar* (Atlantic Salmon)

### Priority 1 Species of Greatest Conservation Need (SGCN)

**Class:** *Actinopterygii* (Ray-finned Fishes)

**Order:** *Salmoniformes* (Salmon, Trout, And Whitefish)

**Family:** *Salmonidae* (Salmonids)

#### Stressor(s) Addressed By This Conservation Action

Fishing and Harvesting of Aquatic Resources, Lack of knowledge, Problematic Native Species-Diseases, Habitat Shifting or Alteration

<b>Conservation Action</b>	<b>Category:</b> Public Outreach	<b>Biological Priority:</b> high	<b>Type:</b> on-going
Encourage the use of more targeted fishing gear in order to reduce bycatch and habitat disturbance			

#### Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

#### Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

*The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.*